

***Response to Amendment***

The amendment filed 10/17/11 has been entered into the record. Claims 8, 17, 26 and 37 have been amended. Claims 8, 17, 26 and 37 are pending and are under examination.

***Claim Rejections Withdrawn***

The rejection of claims 8 and 17 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement is withdrawn in view of the amendment to the claims.

The objection to claims 8 and 17 is withdrawn in view of the amendment to the claims.

The rejection of claims 8 and 17 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement is withdrawn in view of the amendment to the claims.

The rejection of claims 8 and 17 under 35 U.S.C. 112, second paragraph, is withdrawn in view of the amendment to the claims.

***New Claim Rejections Based on Amendment***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite that the SpaA protein has the amino acid sequence encoded by nucleotide sequence of SEQ ID NO: 7. However, SEQ ID NO: 7 according to the specification depicts a portion of a full-length nucleotide sequence of SpaA gene derived from SE-9 strain. See specification on p. 21. Consequently, the amino acid sequence encoded by SEQ ID NO: 7 does not comprise the amino acids to be substituted at position 531, 214, 253, 69, 154 and 278 as claimed.

The claims recite that “207 amino acid residues at the C-terminus of the SpaA protein are deleted”. It is relative as to which positions occupy 207 amino acids at the C- terminus. Which 207 amino acid residues at the C-terminus are being deleted? Is it the last 207 amino acids of the sequence?

#### ***Status of Claims***

Claims 8 and 17 are rejected. Claims 26 and 37 are withdrawn. No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUWATOSIN OGUNBIYI whose telephone number is (571)272-9939. The examiner can normally be reached on M-F 8:30 am- 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Nickol can be reached on 571-272-0835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Oluwatosin Ogunbiyi/

Primary Examiner, Art Unit 1645